# CHLORINE DIOXIDE HYDRATE



Shipping Name: Chlorine dioxide, hydrate, frozen

Other Names: Alcide

Chlorine dioxide

Chlorine dioxide hydrate (frozen)

Chlorine peroxide





- **WARNING!** POISON! BREATHING THE GAS CAN KILL YOU!
  - Fire fighting gear (including SCBA) provides NO protection. If exposure occurs, remove and isolate gear immediately and thoroughly decontaminate personnel
  - STRONG OXIDIZER! WILL INCREASE THE INTENSITY OF A FIRE! MAY CAUSE FIRE **UPON CONTACT WITH COMBUSTIBLES!**

#### Hazards:

- Extremely irritating to skin, eyes, nose and lungs; skin and eye contact causes severe burns and blindness
- Container may explode when exposed to fire
- Vapors are heavier than air and will collect and stay in low
- When heated, vapors in closed spaces (e.g., tanks, sewers, buildings) in the presence of combustible materials may explode
- Reacts with water or steam to produce hydrochloric acid
- Decomposes upon heating releasing toxic chlorine gas

# Awareness and Operational Level Training Response:

- DO NOT ATTEMPT RESCUE!
- Stay upwind and uphill
- Determine the extent of the problem
- BACK OFF! Isolate a wide area around the release or fire, deny entry and call for expert help
- For container exposed to fire evacuate the area in all directions because of the risk of explosion
- Evacuate or shelter in place the immediate area and downwind for a large release
- Notify local health and fire officials and pollution control agencies

### **Description:**

- Orange to red gas
- Shipped frozen, appearing like a solid block of ice
- Faint bleach-like odor
- Flammable and a strong oxidizer which may cause other combustible materials to burn
- Vapors are heavier than air and will collect and stay in low areas
- A liquid below 52° F

# **Operational Level Training Response:**

RELEASE, NO FIRE:

- Keep material frozen if possible
- Use large amounts of water well away from the material to disperse vapors - contain runoff
- Ventilate confined area if it can be done without placing personnel at risk

#### FIRE:

- Material does not easily burn; if surrounding materials are on fire and conditions permit, do not extinguish. Cool exposures using unattended monitors. If fire must be fought, use an agent appropriate for the burning material
- If material is not leaking, cool exposed containers with large quantities of water from unattended equipment or remove intact containers if it can be done safely
- If cooling streams are ineffective (unvented container distorts, bulges or shows any other signs of deforming), withdraw immediately to a secure location

#### First Aid:

### DO NOT ATTEMPT RESCUE!

- Provide Basic Life Support/CPR as needed
- Decontaminate the victim as follows:
  - ♦ Inhalation remove the victim to fresh air and give oxygen if available
  - Skin remove and isolate contaminated clothing (including shoes) and wash skin with soap and large volumes of water for 15 minutes
  - Eye rinse eyes with large volumes of water or saline for 15 minutes
  - Swallowed do not make the victim vomit
- Seek medical attention
- Toxic effects may be delayed
- For skin burns decontaminate with water and apply a clean dry dressing

CAS: 10049-04-4